

THE POPPY: THERAPEUTIC POTENTIAL IN CASES OF DEMENTIA WITH DEPRESSION

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Through advances in medicine, the human life span has lengthened with a consequent increase in the population of geriatric patients with dementia and depression. The choice of psychotropic medication for these patients poses special problems owing to their increased susceptibility to adverse drug reactions.¹⁻³ The side effects of major tranquilizers, e.g. extra-pyramidal restlessness, parkinsonism, and hypotensive episodes, may complicate the clinical picture of an elderly, agitated patient. However, the main clinical problem with these drugs is that there is often *mental hebetude* even though target symptoms have abated. The patients appear overdrugged, and relatives often refer to them as "zombies," and are discomforted in their presence. Many of these patients display rapid clinical improvement following discontinuation of maintenance doses of psychotropic drugs,⁴ calling in question the advisability of long-term medication for psycho-geriatric patients.

As for tricyclic medication for the depressed aged patient, there is a lowered threshold for toxic confusion, glaucoma, urinary retention, cardiovascular embarrassment, and parkinsonism.⁵ This may at times seriously limit their use in the elderly.

OPIATES AND THE GERIATRIC PATIENT WITH DEMENTIA AND DEPRESSION

Few reports exist on the use of opiates in the treatment of the depressed and confused elderly patient. In their 1960 study,⁶ Abse and Dahlstrom found that depressed and agitated geriatric patients receiving deodorized tincture of opium showed cheerful mood, increased mental competence, and interest in people and surroundings. During the past 27 years, the senior author has treated many cases of senile dementia with suitably adjusted dosage of opium-related compounds. The results have often been superior to those obtained previously in the same patients with other medications, including phenothiazines and tricyclic antidepressants. Not only the target symptoms (depression, confusion, paranoid ideation, etc.) abated, but a cheerful and cooperative mood appeared, rendering the patient amenable to rehabilitative measures.

The following two cases illustrate the value of opiates in the clinical management of the depressed and confused elderly patient.

Case 1. An 87-year-old wealthy man suffered from agitation, confusion, and disturbed sleep. At night he repeatedly got up to check the doors of his large

house, which he thought was about to be robbed by burglars. During the day, he was depressed with fluctuating confusion and agitation. The senior author, who had been consulted by the family physician, confirmed a diagnosis of cardiovascular degeneration, including cerebral arteriosclerosis, and was of the opinion that the patient might live for another six months. His medicines included a small regular dose of digitalis, and he had been on sedatives and tranquilizers. These, however, had all been ineffective or else had rendered the patient stuporous. An opiate (liquor morphine bimecatis) when given in this case succeeded in establishing a mildly euphoric condition. The previously difficult-to-manage patient became responsive to his caretakers and his interest in life around him revived, including interest in his business affairs. He slept well and, as it happened, lived comfortably for another two years.

Case 2. An 86-year-old widow was hospitalized in an agitated, depressed, and confused state. Living alone for five years following the death of her husband, she had become anxious and depressed, to the point of needing medical attention for some time prior to admission. One of her sons had taken her into his home for the past three months and, although a little improvement at first took place, her symptoms again worsened. She suffered marked insomnia, anorexia, weight loss, and agitation. A variety of psychotropic medications, including major tranquilizers and antidepressants, in adequate doses were ineffective in relieving her symptomatology.

On admission, the patient was cooperative but agitated and depressed, with marked orofacial dyskinesia, which the patient attributed to ill-fitting dentures. She was oriented, but her recent memory was severely impaired. She did report at times becoming rather confused. She often repeated during the initial interview that she would prefer to be dead rather than incapacitated as she was. Physical examination revealed grade II arteriosclerotic fundi changes and slight pitting edema over both legs.

A number of tests, SMA-6, CBC, VDRL, urinalysis, T3, T4, B12, folate levels, 24-hour urine for heavy metals, chest and skull X-rays, and EEG, were unremarkable. A CAT scan revealed evidence of cerebro-atrophy. An EKG revealed prolonged QT intervals and ST and T wave changes with poor R wave progression. A cardiology consult for abnormal EKG recommended digitalization, which was accomplished on 0.125 units q.o.d. This did not produce improvement in her psychological symptoms. The patient was then placed on doxepin HCl 25 mg t.i.d., later increased to 50 mg t.i.d. She showed only minimal response. After two weeks of treatment, however, this medication had to be stopped since she developed marked orthostatic hypotension. She was then placed on deodorated tincture of opium. On this medication, she improved gradually, requiring, on discharge, 20 drops orally b.i.d. and 35 drops orally q.h.s. The patient was then transferred to a minimal care nursing facility. Though not able to take full care of herself, she was more responsive, cheerful, and sleeping regularly. She is doing so well at the time of this writing (two months after transfer) that she is planning to return to her son's household.

COMMENT

Several considerations are apt to restrain medicinal use of opiates. The possibility of serious side effects, e.g., respiratory depression, and the potential for addiction are two most important deterrents to their use. Jaffe⁷ many years

ago opined that the fear of addiction is out of proportion to the actual frequency of its occurrence. In the cases of opium-treated dementias with which we are concerned, this fear seems especially misplaced. In our experience, while the chronic brain syndrome patient does once again become symptomatic if taken off the opiates, he does *not* require increasing doses of it over time. In this regard, the operant conditioning experiment of Nichols⁸ is of special interest. He demonstrated that rats who administer morphine to themselves become addicted whereas rats who receive the drug passively do not. He also found that older rats develop less "opiate-directed behavior" than young rats do; this implies an inverse relationship between opiate addiction and age.

The favorable response of the depressed and demented geriatric patients to opiates needs replication in controlled, double-blind trials. Such confirmation may imply that certain chronic brain syndromes result from the deficiency of the recently discovered endogenous morphine-like substances^{9, 10} and that opium serves as a supplemental source for such patients. Karl Verebey *et al.*¹¹ in a 1978 review of recent knowledge of endogenous opioid peptides, proposed that the level of functional endorphins is related to psychological events, with a normal level needed for psychological homeostasis. It seems likely that in some patients suffering organic dementia with depression that part of the pathogenesis lies in a disturbance of this homeostasis, since some of them respond favorably, even dramatically, to the administration of the deodorated tincture of opium. On the other hand, some patients with similar symptoms accompanying organic dementia do not respond.

Some of these nonresponders to deodorated tincture of opium alone, do respond favorably to a combination of tricyclic medication and deodorated tincture of opium, and I have found it possible to reduce the dosage of tricyclic medication considerably and to administer, with this reduced dose of a tricyclic, 10–15 drops of deodorated tincture of opium, *t.i.d.*, with a subsequent favorable response, that is, diminution of confusion, agitation, depression, and paranoid ideation. Of course, it is known that the hypothalamic and limbic dysfunctions occurring in depression involve the monoamines and that tricyclic antidepressants block neuronal re-uptake of them.¹² I have found that some senile dementia patients with depressive symptomatology do better with tricyclic medication by day and deodorated tincture of opium at night.

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